

**SP7 Antibody (monoclonal) (M01)**  
Mouse monoclonal antibody raised against a partial recombinant SP7.  
Catalog # AT4011a

## Specification

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### SP7 Antibody (monoclonal) (M01) - Product Information

Application	IF, WB, E
Primary Accession	<a href="#">Q8TDD2</a>
Other Accession	<a href="#">NM_152860</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	44994

### SP7 Antibody (monoclonal) (M01) - Additional Information

**Gene ID** 121340

#### Other Names

Transcription factor Sp7, Zinc finger protein osterix, SP7, OSX

#### Target/Specificity

SP7 (NP\_690599, 87 a.a. ~ 162 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### Dilution

WB~~1:500~1000

#### Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

#### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

#### Precautions

SP7 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

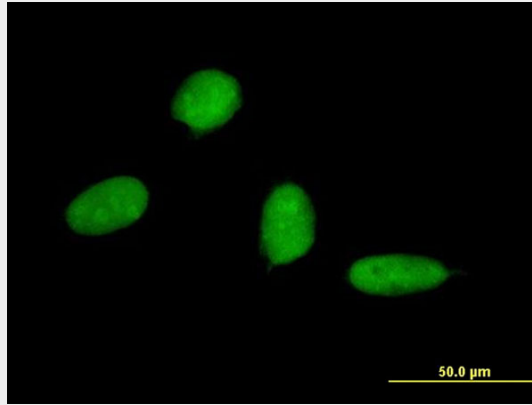
### SP7 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

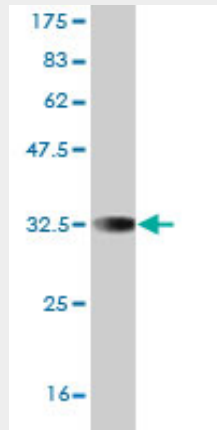
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

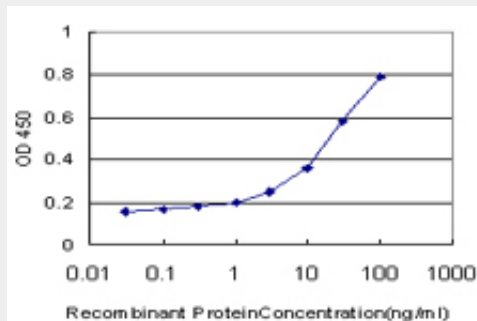
**SP7 Antibody (monoclonal) (M01) - Images**



Immunofluorescence of monoclonal antibody to SP7 on HeLa cell . [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (34.1 KDa) .



Detection limit for recombinant GST tagged SP7 is approximately 1ng/ml as a capture antibody.

**SP7 Antibody (monoclonal) (M01) - Background**

This gene encodes a member of the Sp subfamily of Sp/XKLF transcription factors. Sp family proteins are sequence-specific DNA-binding proteins characterized by an amino-terminal

trans-activation domain and three carboxy-terminal zinc finger motifs. This protein is a bone specific transcription factor and is required for osteoblast differentiation and bone formation.

### **SP7 Antibody (monoclonal) (M01) - References**

Identification of a frameshift mutation in Osterix in a patient with recessive osteogenesis imperfecta. Lapunzina P, et al. *Am J Hum Genet*, 2010 Jul 9. PMID 20579626. Replication of previous genome-wide association studies of bone mineral density in premenopausal American women. Ichikawa S, et al. *J Bone Miner Res*, 2010 Aug. PMID 20200978. Regulation of the osteoblast-specific transcription factor Osterix by NO66, a Jumonji family histone demethylase. Sinha KM, et al. *EMBO J*, 2010 Jan 6. PMID 19927124. Twenty bone-mineral-density loci identified by large-scale meta-analysis of genome-wide association studies. Rivadeneira F, et al. *Nat Genet*, 2009 Nov. PMID 19801982. High-density association study of 383 candidate genes for volumetric BMD at the femoral neck and lumbar spine among older men. Yerges LM, et al. *J Bone Miner Res*, 2009 Dec. PMID 19453261.